UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/751,340	01/03/2004	Daniel Lovy	1370.249US1	7580

21186   7590   01/06/2011
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EXAMINER
RUTKOWSKI, JEFFREY M

ART UNIT	PAPER NUMBER
2473	

NOTIFICATION DATE	DELIVERY MODE
01/06/2011	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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		Application No.	Applicant(s)
Office Action Summary		10/751,340	LOVY ET AL.
		Examiner	**Art Unit**	
		JEFFREY M. RUTKOWSKI	2473	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *30 September 2010*.
2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-72* is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) *1-72* is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a) ☐ All   b) ☐ Some * c) ☐ None of:
        1. ☐ Certified copies of the priority documents have been received.
        2. ☐ Certified copies of the priority documents have been received in Application No. _____.
        3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claims 73-112 have been cancelled.
Claims 1-72 are pending.

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set forth in

37 CFR 1.17(e), was filed in this application after final rejection. Since this application is

eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e)

has been timely paid, the finality of the previous Office action has been withdrawn pursuant to

37 CFR 1.114. Applicant's submission filed on 09/30/2010 has been entered.

Claim Rejections - 35 USC § 101

2.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or
> any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and
> requirements of this title.

3.   **Claims 19-35** are rejected under 35 U.S.C. 101 because the claimed invention is directed

to non-statutory subject matter. Neither the claims nor the specification limits the scope of the

"machine-readable storage medium" to a <u>non-transitory</u> medium because the specification

defines the "machine-readable storage medium" in an open-ended manner (see page 25 lines 15-

24). Therefore, Examiner asserts that the claimed "machine-readable storage medium" can be

transitory signal. Transitory signal is a signal per se, which falls into a non-statutory subject

matter.

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

5.   The factual inquiries set forth in Graham **v.** John Deere Co., 383 U.S. 1, 148 USPQ 459

(1966), that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

1.   Determining the scope and contents of the prior art.
2.   Ascertaining the differences between the prior art and the claims at issue.
3.   Resolving the level of ordinary skill in the pertinent art.
4.   Considering objective evidence present in the application indicating obviousness
        or nonobviousness.

6.   **Claims 1-8, 11-26, 29-44, 47-62 and 65-72** are rejected under 35 U.S.C. 103(a) as being

unpatentable over Horbal et al. (US Pat 6,112,246), hereinafter referred to as Horbal, in view of

Traversat et al. (US PG Pub 2002/0143855), hereinafter referred to as Traversat, and Brown et

al. (US Pat 4,748,618), hereinafter referred to as Brown.

7.   For **claims 1, 19, 37 and 55**, Horbal discloses a common interface (micro-server; see

figure 2) to operate in the communications device (the micro-server includes a discovery server

that is used to discover newly connected network devices; see col. 12 lines 43-55 and figure 12)

and the dissimilar communication devices (figure 2 shows the micro-server is implemented in

dissimilar devices) to allow communications therebetween in accordance with aspects of the

communications device and an abstracted version of the dissimilar communication devices (the

micro server is used to abstract communication protocol aspects of the devices; see col. 2 lines

20-30) and the communications device (device that is using the micro-server's discovery

functionality; see col. 12 lines 43-55 and figure 12) further to share data with other dissimilar

devices without requiring a proxy device to enable communications (figure 2 shows the devices

on the Ethernet are able to communicate without the use of a proxy). Horbal suggests the

dissimilar communication devices (the dissimilar devices from figure 2) having dissimilar

communication standards (each dissimilar device of figure 2 could use either a standard

application-to-application protocol or a different OEM based application-to-application protocol;

see col. 9 line 60 to col. 10 line 20 and figure 6. Horbal suggests the standard used for each

OEM based application-to-application protocol would be dissimilar because each OEM supplied

applet **518** uses a specialized server embedded in the OEM application; see col. 10 lines 40-45.

Also, figure 6 suggests the OEM provided applet **514** is dissimilar because each OEM provided

applet **514** is special to each OEM provider).

8.   Horbal discloses a communications device having at least a discovery protocol layer

(device that is using the micro-server's discovery functionality; see col. 12 lines 43-55 and figure

12). Horbal discloses an auto-discovery mechanism where the network is scanned for new

devices (see col. 14 lines 30-40) within a particular subnet (see col. 16 lines 63-67). Horbal does

not disclose the use of discovery requests. Traversat discloses initiating a discovery request over

the network (discovery messages are propagated over a network; see paragraph 0286), the

communications device further to receive one or more responses from dissimilar

communications devices over the network (the node that propagates the message receives

responses from nodes that have receives the discovery message; see paragraph 0286. Figure 1B

shows that devices on the network are dissimilar) to at least partially determine a network

topography (the purpose of sending the discovery message is to determine the nodes that are in

the subnet; see paragraph 0286). It would have been obvious to a person of ordinary skill in the

art at the time of the invention to use discovery request messages in Horbal's invention to

provide the essential discovery infrastructure for building high-level discovery services

(Traversat, paragraph 0261).

9.   Horbal discloses the use of micro-server that operates in devices to enable

communications between dissimilar devices (see figure 2). Horbal does not disclose using

something other than a server and a proxy to enable communications. Brown discloses

transmitting data between the communication device (source device) and the dissimilar

communication devices (one or more receiving devices that include a video display monitor and

telefax) without requiring a proxy device and without requiring a server to enable

communications (data is transmitted from the source device to the one or more receiving devices

via protocol conversion; see col. 2 lines 20-42 and col. 3 lines 55-68. Figure 1 shows the

protocol conversion is performed via hardware circuitry without the use of a proxy and a server).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to

use Brown's arrangement in Horbal's invention to provide a scalable interface that operates at a

variety of network speeds (Brown, abstract).

10.   Specifically for **claim 55**, Horbal discloses a network (figure 2 shows an Ethernet

network).

11.   For **claims 2, 20, 38 and 56**, Horbal discloses the use of a LAN (Ethernet of figure 2).

Horbal does not disclose the use of discovery requests. Traversat discloses the initiating of the

discovery request (discovery messages are propagated over a network; see paragraph 0286). It

would have been obvious to a person of ordinary skill in the art at the time of the invention to use

discovery request messages in Horbal's invention to provide the essential discovery

infrastructure for building high-level discovery services (Traversat, paragraph 0261).

12.   The combination of Horbal and Traversat discloses the initiating of the discovery request

is performed over a local area network (LAN) (according to the combination, the propagated

discovery messages are sent over the Ethernet).

13.   For **claims 3, 21, 39 and 57**, Horbal discloses prior to said transmitting data,

establishing a network connection between said dissimilar communication devices (the auto-

discovery mechanism discovers devices that are connected to the network; see col. 14 lines 30-

35).

14.   For **claims 4, 22, 40 and 58**, Horbal discloses said common interface (micro-server)

comprises a layered functional hierarchy having multiple layers (figure 4 shows the micro-server

functionality is hierarchical; see col. 8 lines 20-25).

15.   For **claims 5, 23, 41 and 59**, Horbal discloses at least one of said multiple layers

comprises a protocol layer (item **426** of figure 4), said protocol layer including at least two

protocols (figure 4 shows item **426** includes the TCP and the IP protocols).

16.   For **claims 6, 24, 42 and 60**, Horbal discloses said at least two protocols comprise a

messaging protocol (TCP/IP is used to request information from the nodes on the network; see

col. 14 lines 47-53).

17.   Horbal does not disclose the use of a discovery protocol. Traversat discloses a discovery

protocol (core discovery protocol; see paragraph 0286).   It would have been obvious to a person

of ordinary skill in the art at the time of the invention to use a discovery protocol in Horbal's

invention to provide the essential discovery infrastructure for building high-level discovery

services (Traversat, paragraph 0261).

18.   Specifically for **claims 6 and 24**, Horbal does not disclose the use of a discovery

protocol. Traversat discloses the discovery protocol being used to initiate the discovery request

(the core discovery protocol is used to propagate discovery request messages; see paragraph

0286). It would have been obvious to a person of ordinary skill in the art at the time of the

invention to use a discovery protocol in Horbal's invention to provide the essential discovery

infrastructure for building high-level discovery services (Traversat, paragraph 0261).

19.   For **claims 7, 25, 43 and 61**, Horbal suggests at least one of the multiple layers

comprises an abstraction layer including the aspects of the dissimilar communication devices

that have been abstracted (an API is used to abstract the micro-server to the OEM layer; see col.

5 lines 55-58 and col. 6 line 48).

20.   For **claims 8, 26, 44 and 62**, Horbal discloses said data is transmitted between said

dissimilar devices through a layer of said layered functional hierarchy (figure 4 of Horbal shows

data is transmitted through a protocol stack and API layer).

21.   For **claims 11, 29, 47 and 65**, Horbal discloses consumer devices can communicate via

web browser (see col. 4 lines 35-40 and figure 6). Horbal does not disclose the use of file

sharing. Traversat discloses wherein said data comprises at least one file (peer-to-peer systems

are use for file sharing; see paragraph 0015). It would have been obvious to a person of ordinary

skill in the art at the time of the invention use file sharing in Horbal's invention to increase the

utilization of information (Traversat, paragraph 0013).

22.   For **claims 12, 30, 48, and 66**, Horbal does not disclose the use of file sharing. Traversat

discloses said at least one file comprises a digital media file (music files are shared; see

paragraph 0015). It would have been obvious to a person of ordinary skill in the art at the time

of the invention use file sharing in Horbal's invention to increase the utilization of information

via Napster (Traversat, paragraphs 0013, 0015).

23.   For **claims 13, 31, 49 and 67**, Horbal does not disclose the use of file sharing. Traversat

discloses said digital media file comprises at least one of: a digital video file and a digital audio

file (music files are shared; see paragraph 0015). It would have been obvious to a person of

ordinary skill in the art at the time of the invention use file sharing in Horbal's invention to

increase the utilization of information via Napster (Traversat, paragraphs 0013, 0015).

24.   For **claims 14, 32, 50 and 68**, Horbal discloses said dissimilar communications devices

at least include: computing devices (client PC's; see figure 2), wherein the computing devices

may be configured to exchange data by use of differing protocols (figure 6 shows differing

protocols can be used to communicate with the micro-server), remote control devices

(thermostat; see col. 3 lines 25-50). Horbal suggests digital audio devices, wireless phones, and

digital media devices (Horbal's invention can be implemented in consumer products; see col. 4

lines 34-36).

25.   For **claims 15, 33, 51 and 69**, Horbal discloses said aspects of said dissimilar

communications devices that have been abstracted include: controlling (the thermostat is

controlled via micro-server; see col. 3 lines 25-50), executing (the OEM API abstracts how

functions are executed; see col. 7 lines 10-15, recording (the view server that is built into the

micro-server abstracts how information is recorded; see figure 12), storing (the OEM API

abstracts how device information is stored; see col. 7 lines 1-10), discovering (the micro-server includes a discovery mechanism; see col. 12 lines 43-55 and figure 12), and messaging (the OEM API abstracts the messaging; see col. 6 lines 44-54).

26.   For **claims 16, 34, 52 and 70**, Horbal discloses wherein at least one of said dissimilar communications devices includes a capability to control another of said dissimilar communications devices (figure 8 shows a control page of the micro-server).

27.   For **claims 17, 35, 53 and 71**, Horbal discloses wherein at least one of said dissimilar communications devices includes a capability to perform at least one of the following tasks: access digital data (the auto-discovery mechanism of the micro-server accesses information for display in an HTML index page; see col. 17 lines 4-6), execute digital data, and transfer digital data.

28.   For **claims 18, 36, 54 and 72**, Horbal discloses wherein at least one of said dissimilar communications devices includes the capability to perform at least one of the following tasks: store digital data, transfer digital data, and organize digital data (figure 12 shows the micro-server can organize data into a table format for presentation to a user).

29.   **Claims 9-10, 27-28, 45-46 and 63-64** are rejected under 35 U.S.C. 103(a) as being unpatentable over Horbal in view of Traversat and Brown, as applied to **claims 4, 22, 40 and 58 respectively** above, and further in view of Wilkinson et al. (US Pg Pub 2002/0099867), hereinafter known as Wilkinson.

30.   For **claims 9, 27, 45 and 63**, Horbal's invention supports the use of standard operating systems (see col. 5 lines 18-30). The combination of Horbal, Brown and Traversat does not disclose the use of an operating system layer. Wilkinson discloses wherein at least one of said

layers comprises an operating system layer (the OS layer **6** is used in a software architecture; see figure 1 and 0043-0044). It would have been obvious to a person of ordinary skill in the art at the time of the invention to use an OS abstraction layer in Horbal's invention to facilitate an OS independent environment.

31.   For **claims 10, 28, 46 and 64**, the combination of Horbal, Brown and Traversat does not disclose the use of an operating system layer. Wilkinson discloses said operating system layer includes the capability to access components of said dissimilar devices (included in the OS layer is an abstraction layer **14** allowing for the use of third party components such as device drivers **18**; see paragraph 0049). It would have been obvious to a person of ordinary skill in the art at the time of the invention to use a device driver in Horbal's invention since device drivers allow an Operating System (OS) to communicate with the network.

Response to Arguments

32.   Applicant's arguments with respect to **claims 1-72** have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEFFREY M. RUTKOWSKI whose telephone number is (571)270-1215. The examiner can normally be reached on Monday - Friday 7:30-5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kwang Yao can be reached on (571) 272-3182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

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/Jeffrey M Rutkowski/
Examiner, Art Unit 2473